

AMENDMENTS TO THE CLAIMS

Claim 1 (previously amended): A semiconductor device having a surface, comprising:

a coating disposed on said semiconductor device surface to cover at least a portion thereof, said coating including boron,
5 carbon, nitrogen and sulfur.

Claim 2 (Previously amended): The semiconductor device of Claim 1, wherein a carbon composition ratio (atomic ratio) of the coating is at least 0.1.

Claim 3 (Previously amended): The semiconductor device of Claim 1, wherein said coating includes oxygen.

Claim 4 (Previously amended): The semiconductor device of Claim 1, further includes a multi-layer structure with a heterogeneous film attached to the coating.

Claim 5 (Previously amended): The semiconductor device of Claim 4, wherein said heterogeneous film contains an amount of structural elements different than the coating.

Claim 6 (Previously amended): The semiconductor device of Claim 4, wherein said heterogeneous film is a film with main components identical to the coating, without sulfur being added thereto.

Claim 7 (Previously amended): The semiconductor device of Claim 4, wherein said heterogeneous film is a film with silicon as a main component.

Claim 8 (Previously amended): The semiconductor device of Claim 1, further includes a III-V compound semiconductor.

Claim 9 (Previously amended): The semiconductor device of Claim 8, wherein said semiconductor is a field effect transistor.

Claim 10 (Previously amended): The semiconductor device of Claim 8, wherein said semiconductor is a bipolar transistor.

Claim 11 (Previously amended): The semiconductor device of Claim 8, wherein said semiconductor is a diode.

Claim 12 (Previously amended): A semiconductor device fabrication method, said method comprising the steps of:

disposing a film formation substrate in a plasma atmosphere containing nitrogen; and

supplying boron atoms, carbon atoms and sulfur atoms to the film formation substrate to thereby form a boron carbon nitride film having sulfur as an additive thereto.

Claim 13 (Previously amended): A semiconductor device fabrication method, said method comprising the steps of:

disposing a film formation substrate facing a boron nitride sputter portion; and

5 supplying carbon atoms and sulfur atoms to the film
formation substrate to thereby form a boron carbon nitride film
having sulfur as an additive thereto.

Claim 14 (Previously amended): A semiconductor device
fabrication method, said method comprising the steps of:

disposing a film formation substrate facing a boron nitride
and carbon sputter portion; and

5 supplying sulfur atoms to the film formation substrate to
thereby form a boron carbon nitride film having sulfur as an
additive thereto.

Claim 15 (Previously amended): A semiconductor device
fabrication method, said method comprising the steps of:

disposing a film formation substrate facing a boron nitride
laser abrasion; and

5 supplying plasma containing carbon atoms and sulfur atoms
to the film formation substrate to thereby form a boron carbon
nitride film having sulfur as an additive thereto.

Claims 16 -19 (Currently Deleted):

Claim 20 (Previously amended): A communication system
device, comprising:

a semiconductor device having a surface; and

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cover at least a portion thereof, said coating including boron,
carbon, nitrogen and sulfur.